

The Enterprise Engineering Series

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Enterprise Modeling

Tackling Business Challenges
with the 4EM Method

 Springer

Overview of the 4EM Method

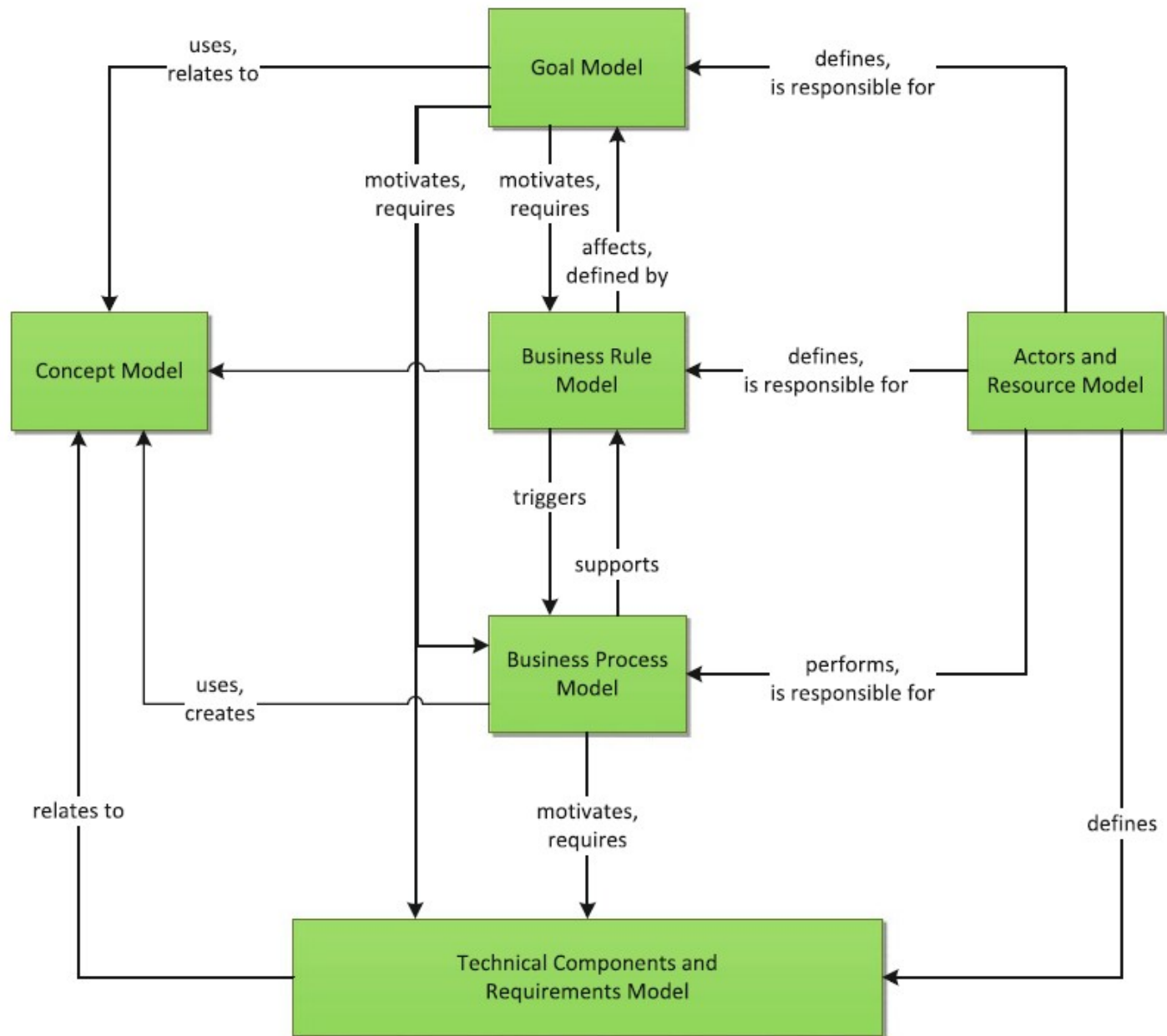


Fig. 7.2 Sub-models of the 4EM approach and their relationships

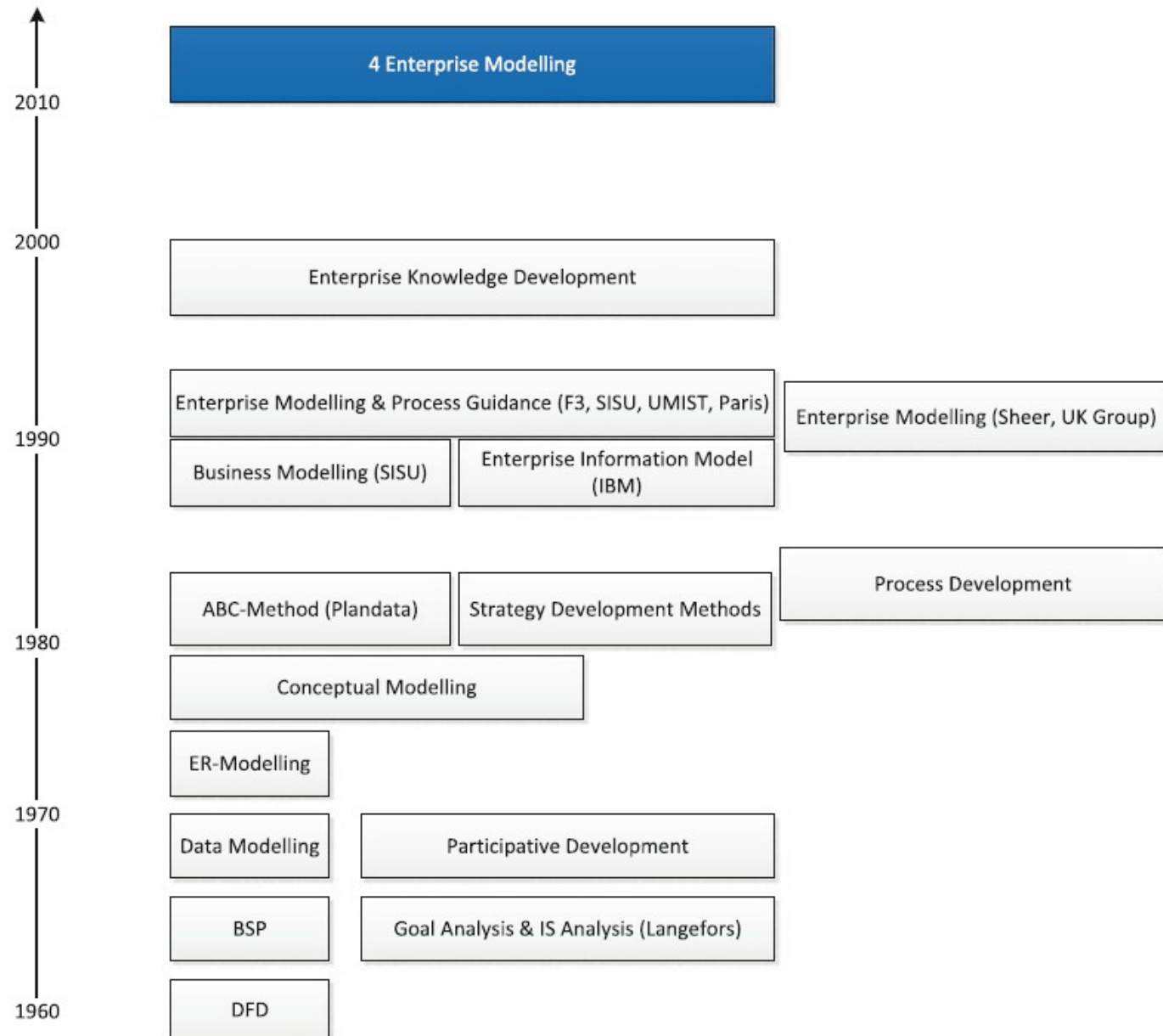


Fig. 7.4 History of the 4EM method

Sub-models of 4EM

Goal model

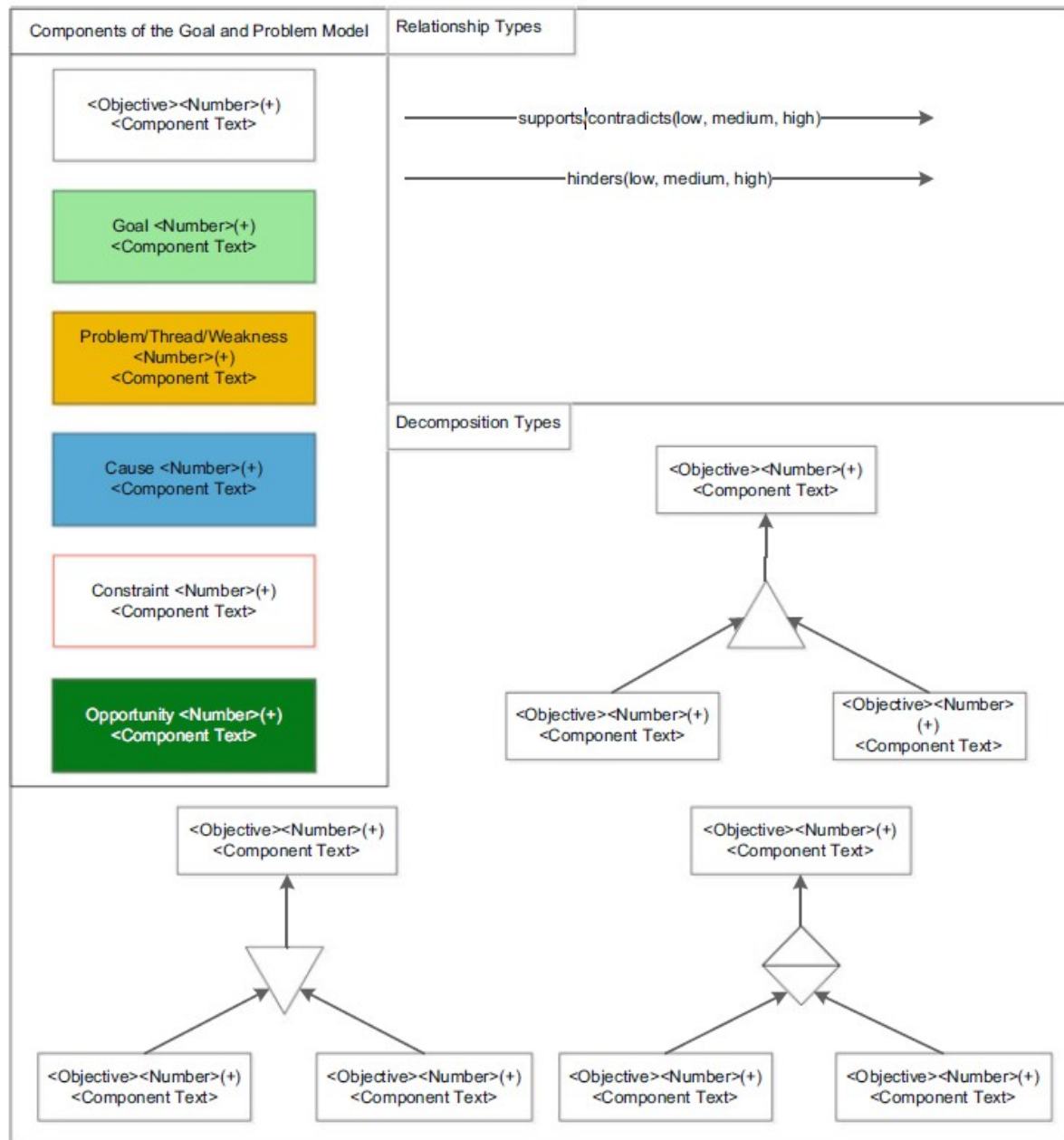


Fig. 8.11 Notation of Goals Models

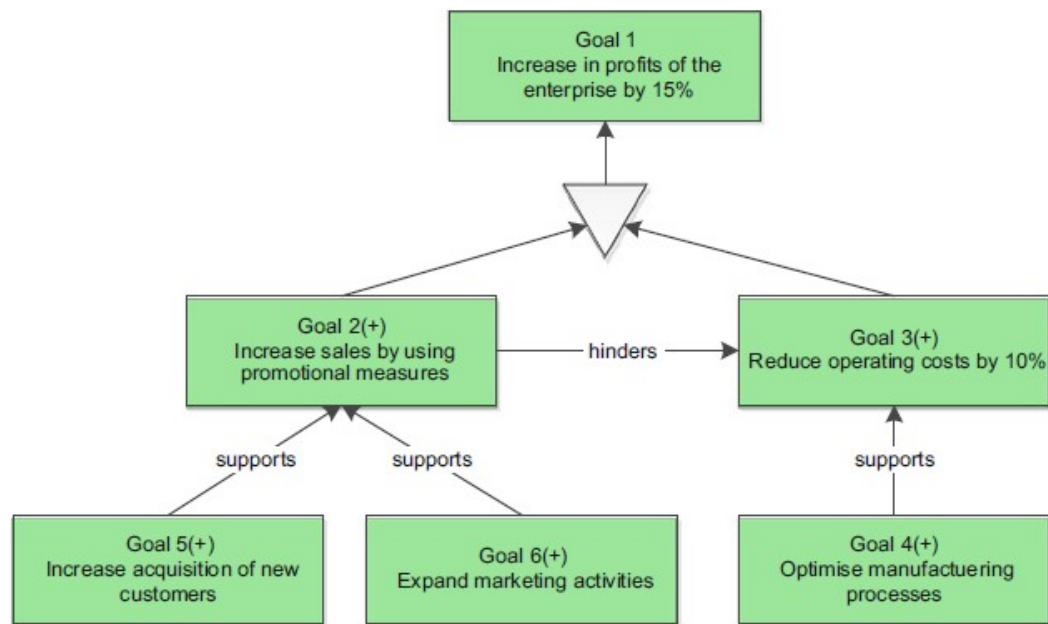


Fig. 8.12 Top goals of A4Y

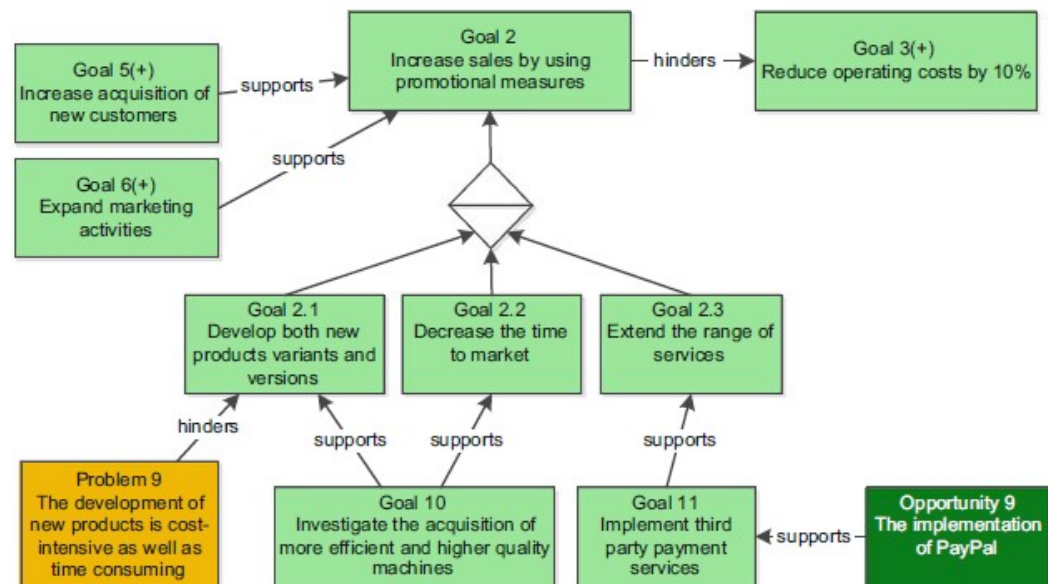


Fig. 8.13 Further refinement of goal 2 by defining sub-goals and exploring opportunities

Business rule model

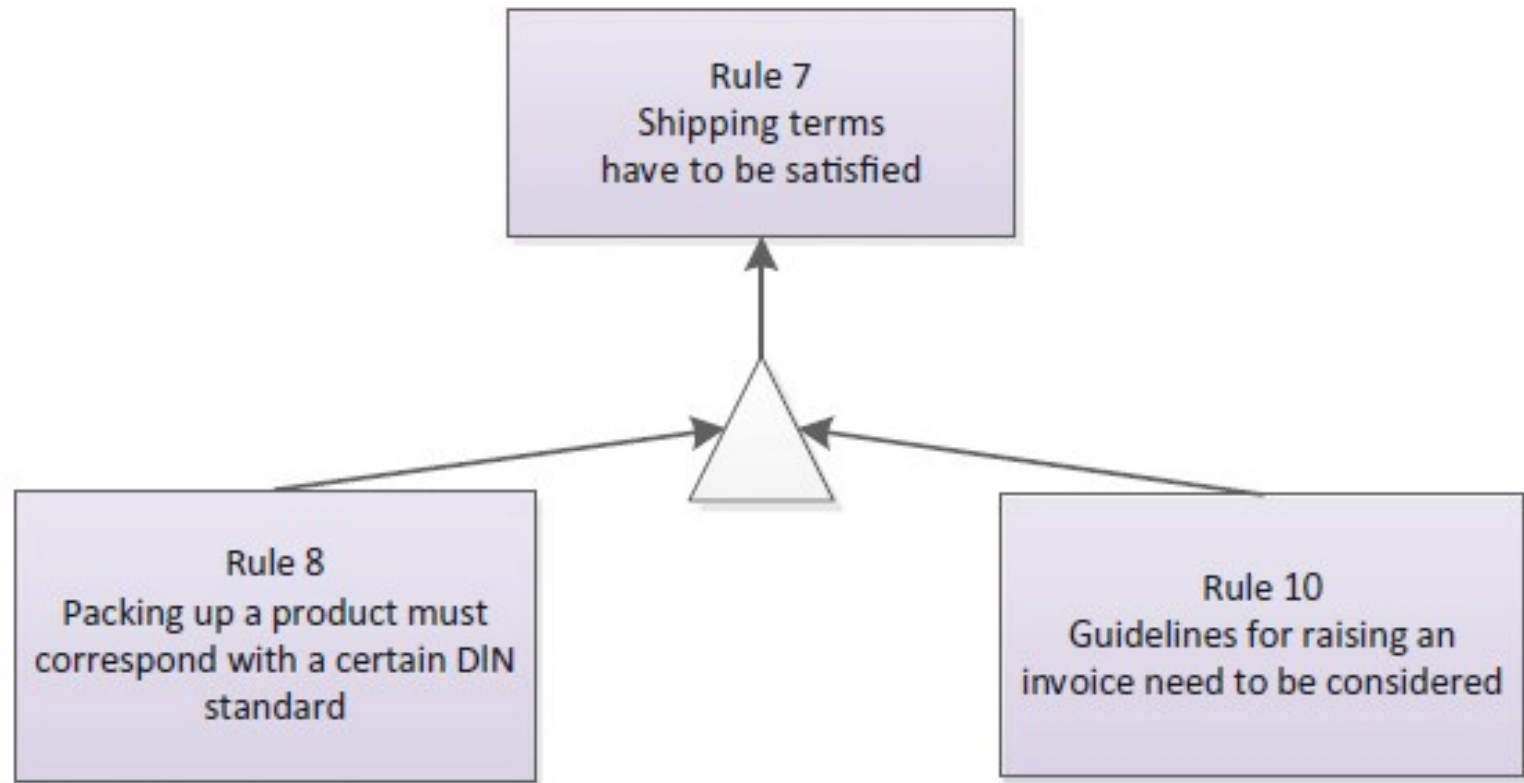


Fig. 8.18 Example of rule decomposition using AND relationship

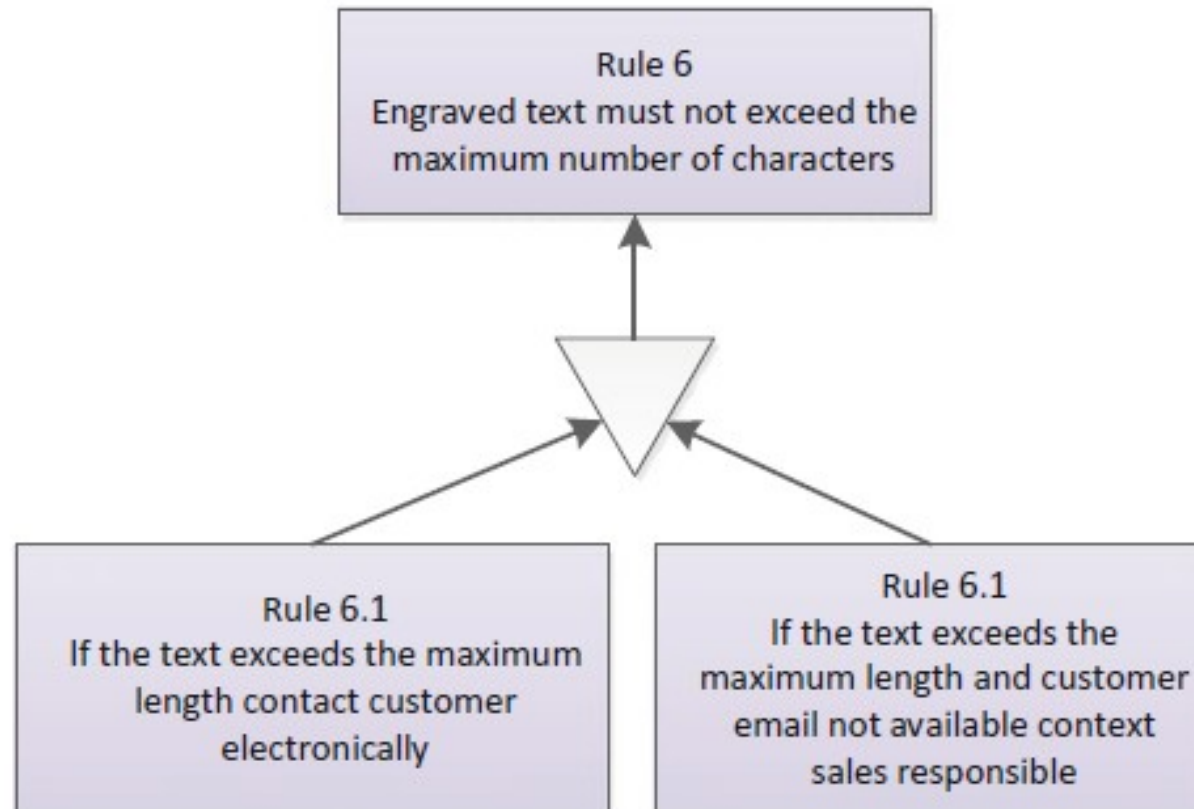


Fig. 8.19 Example of rule decomposition using OR relationship

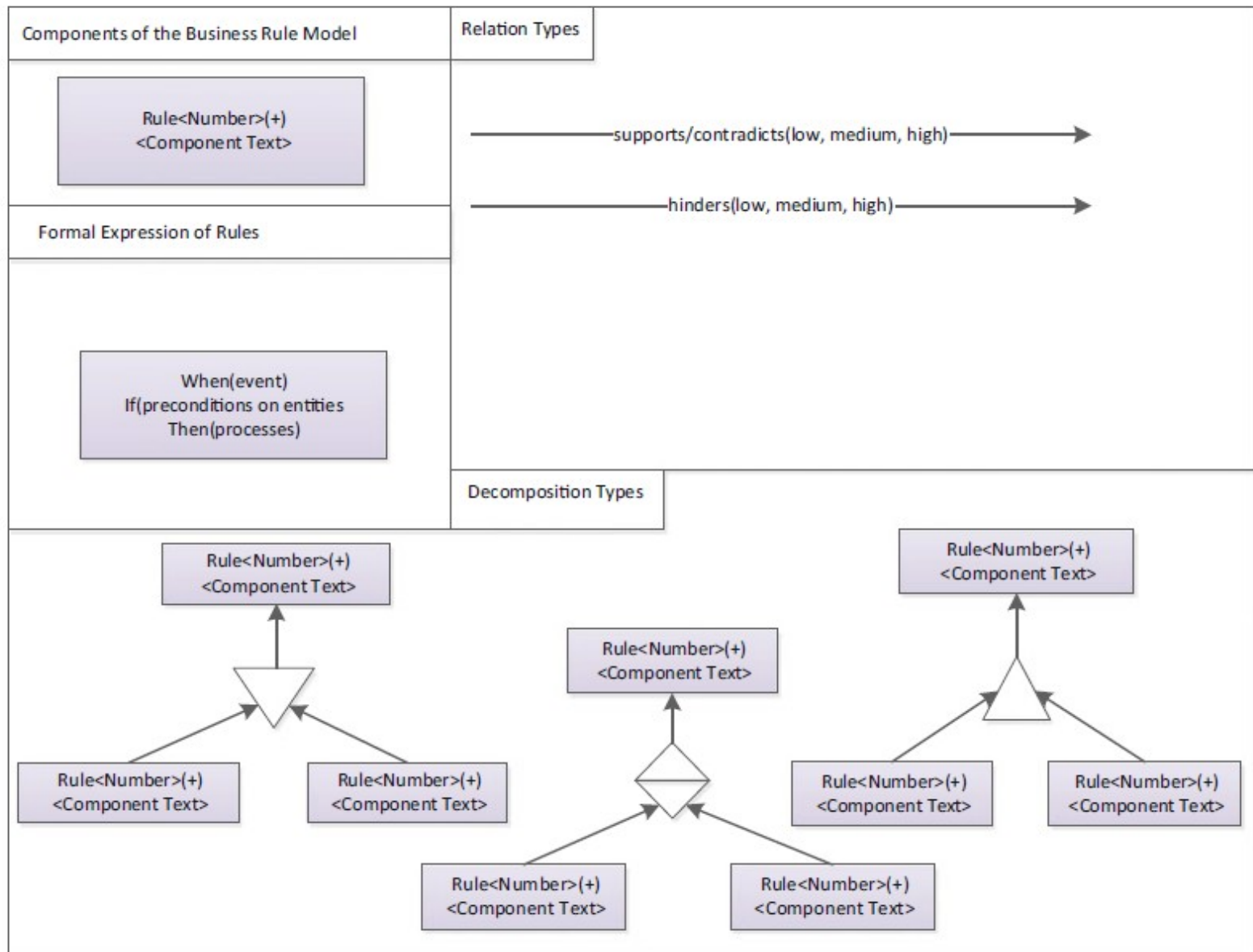


Fig. 8.20 The notation used in the Business Rules Model is similar to that for the Goals Model

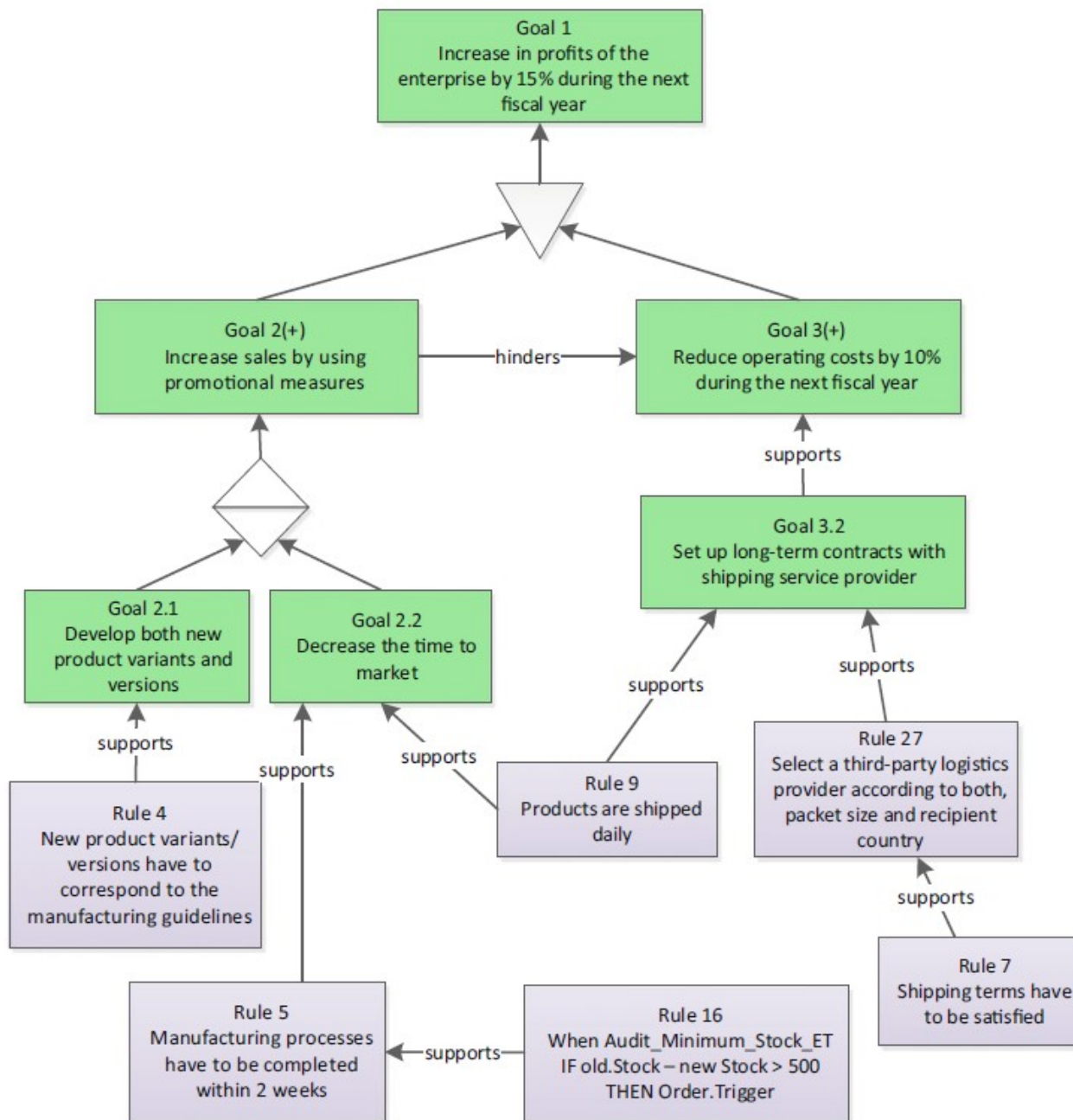


Fig. 8.21 Example of a goal and rule connections in the Business Rule Model

Concept model

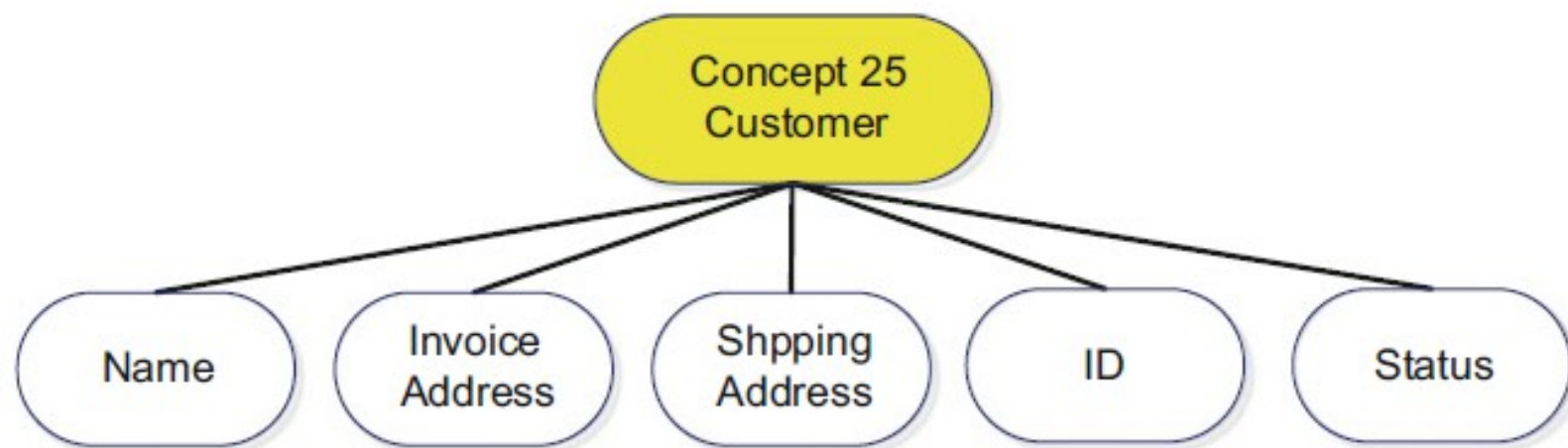


Fig. 8.31 Example of a Concept and its attributes

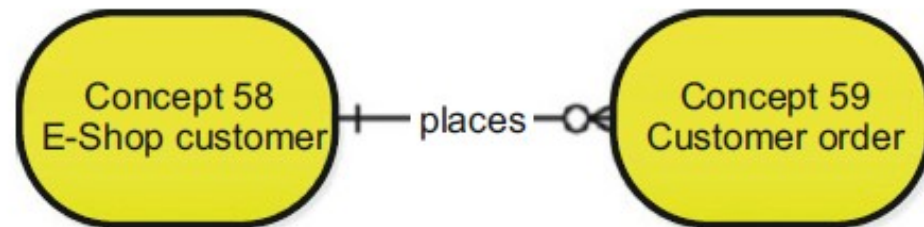


Fig. 8.32 Example of a binary relationship

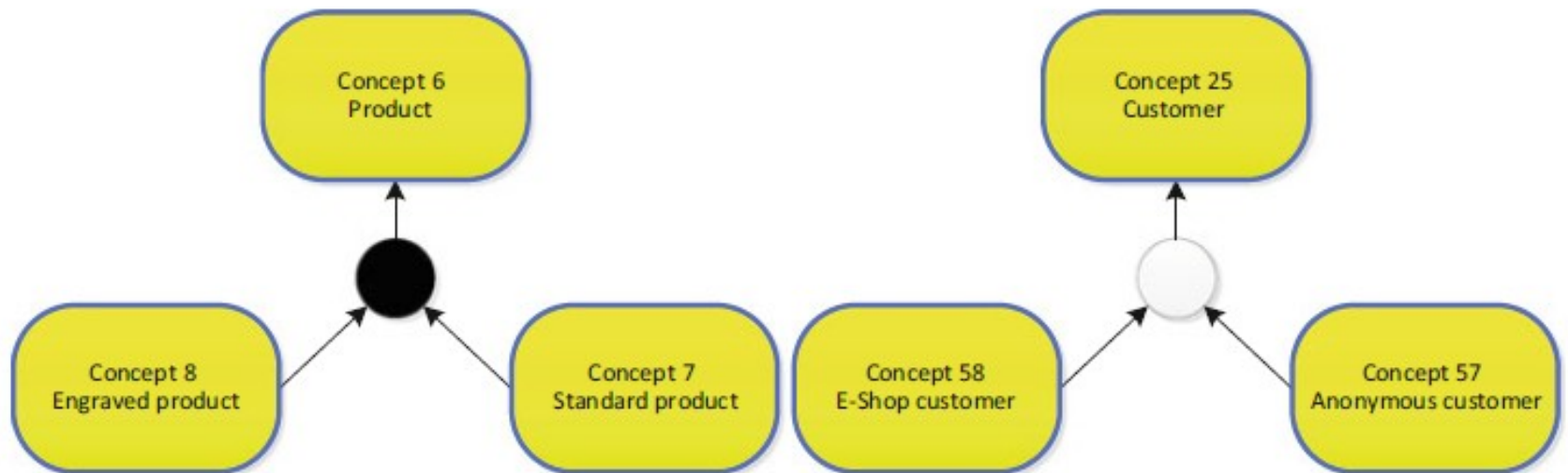


Fig. 8.33 Example of total and partial generalization

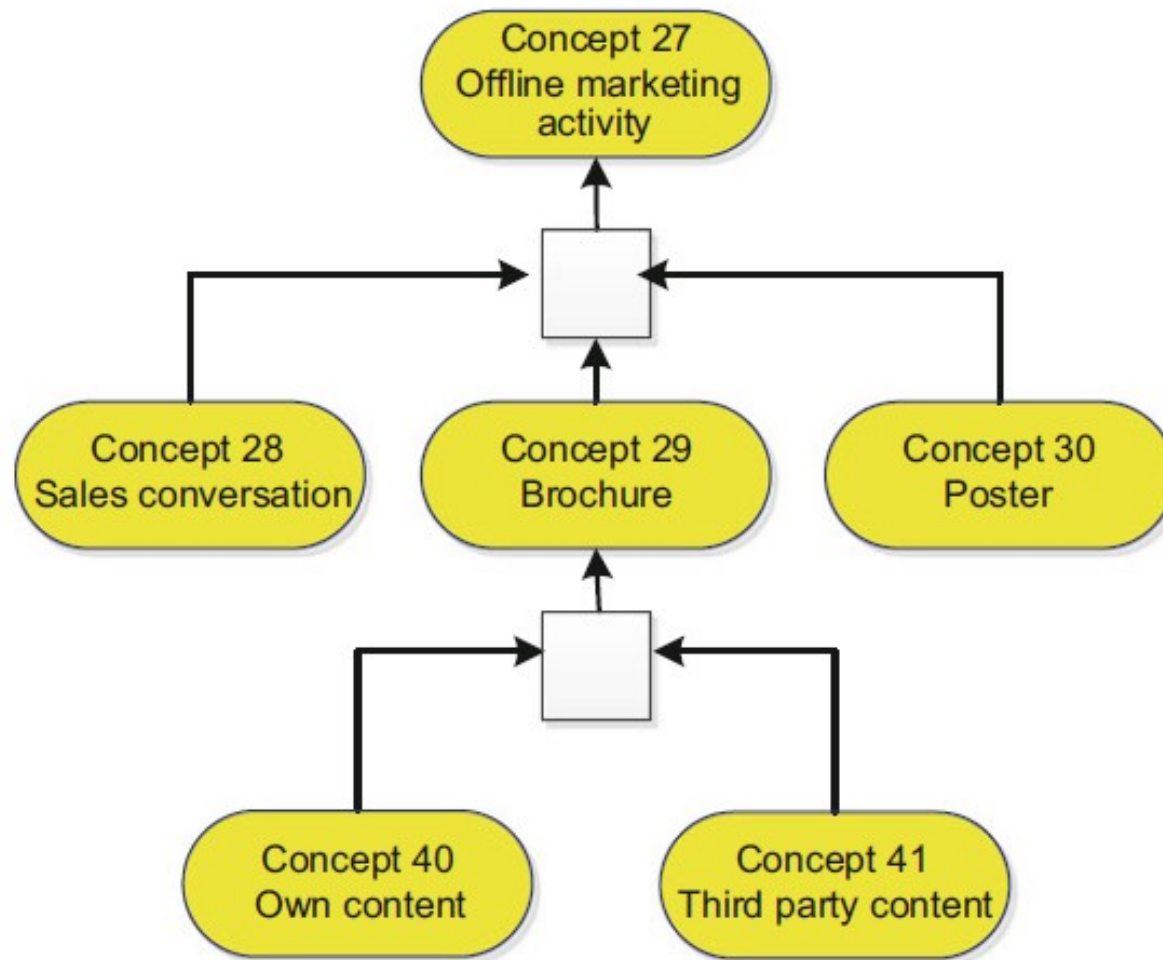


Fig. 8.34 An example of a PartOF relationship structure

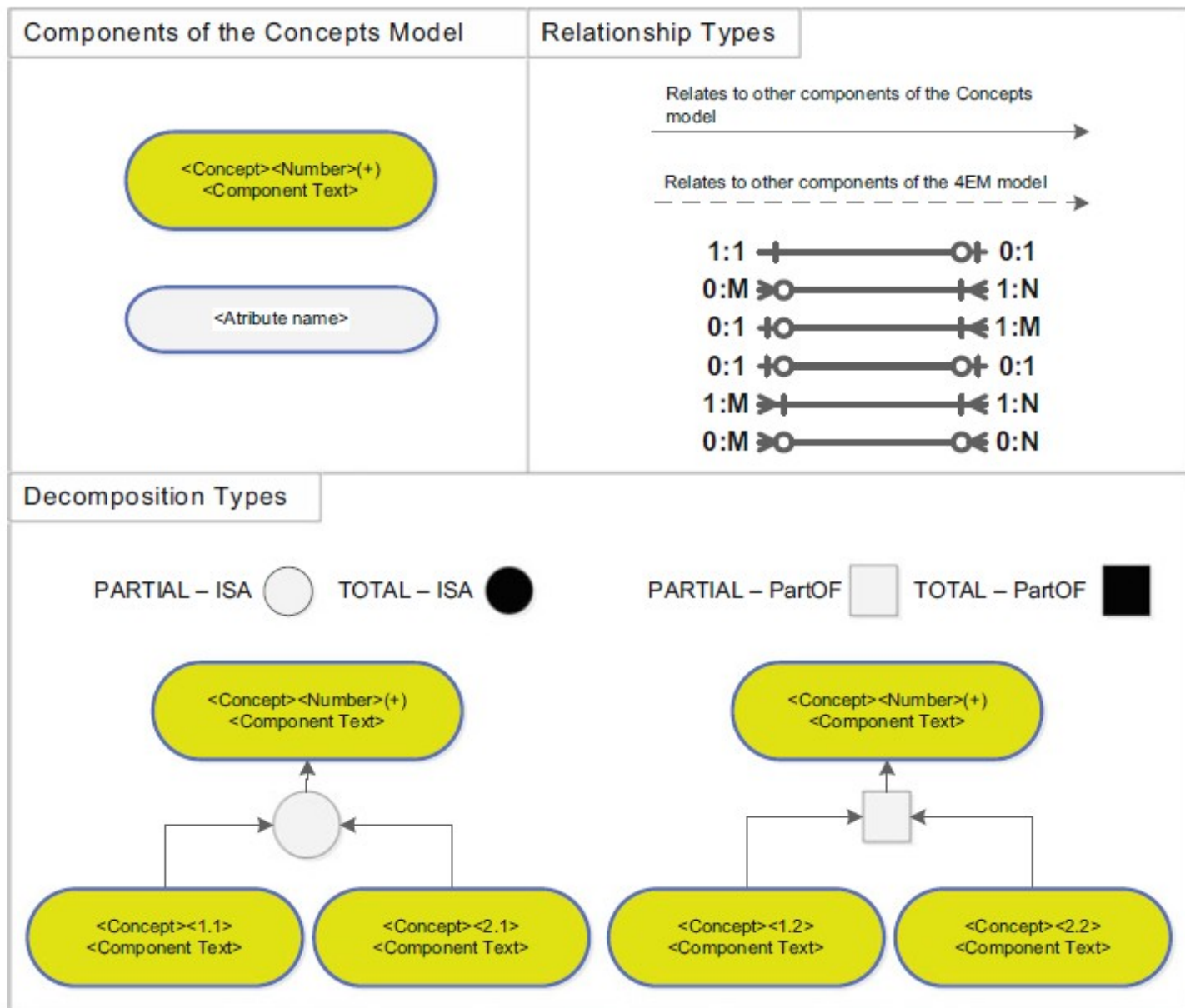


Fig. 8.35 Notation used for Concepts Modeling

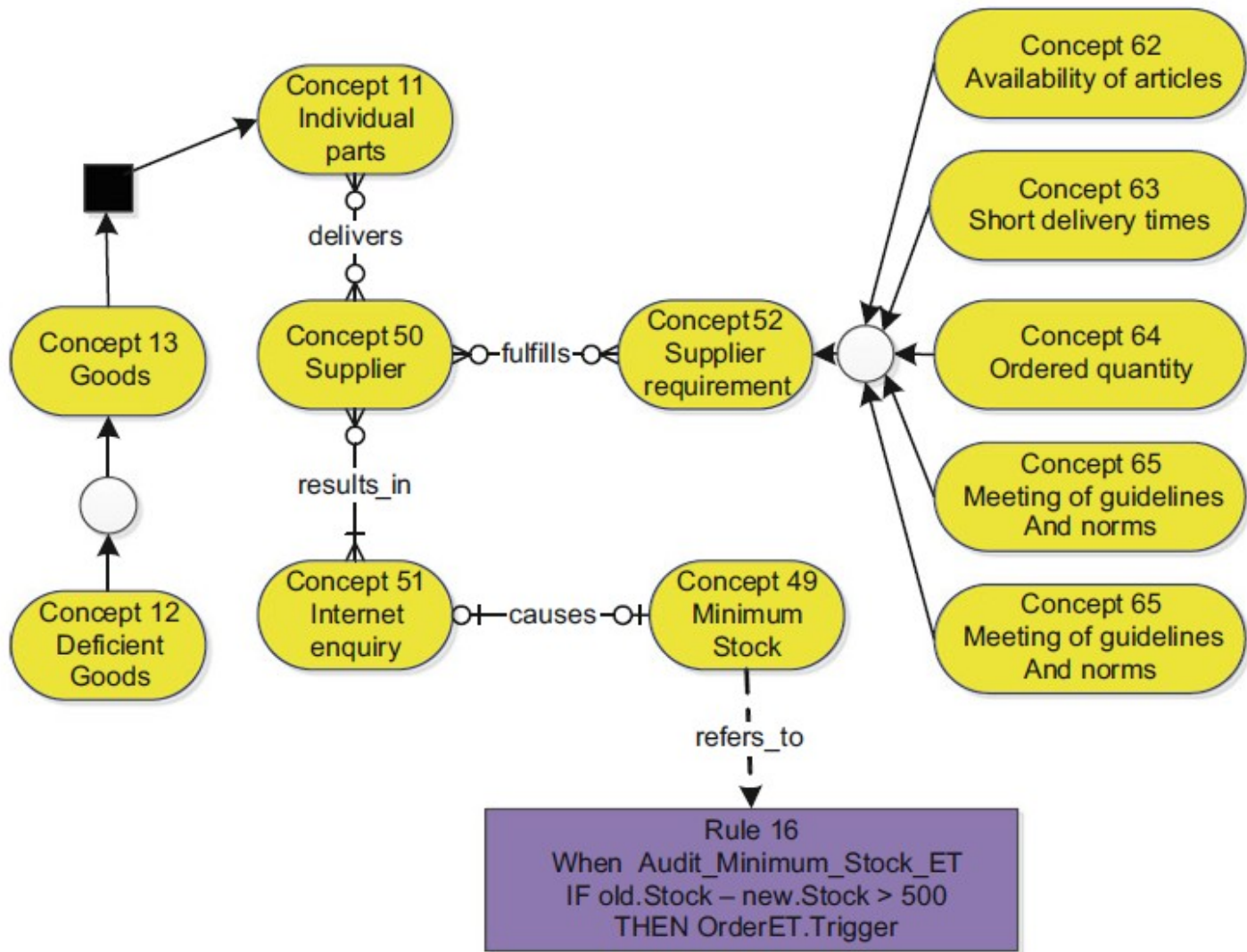


Fig. 8.37 Example of modeling the concept “supplier” in the Concepts Model

Process Model

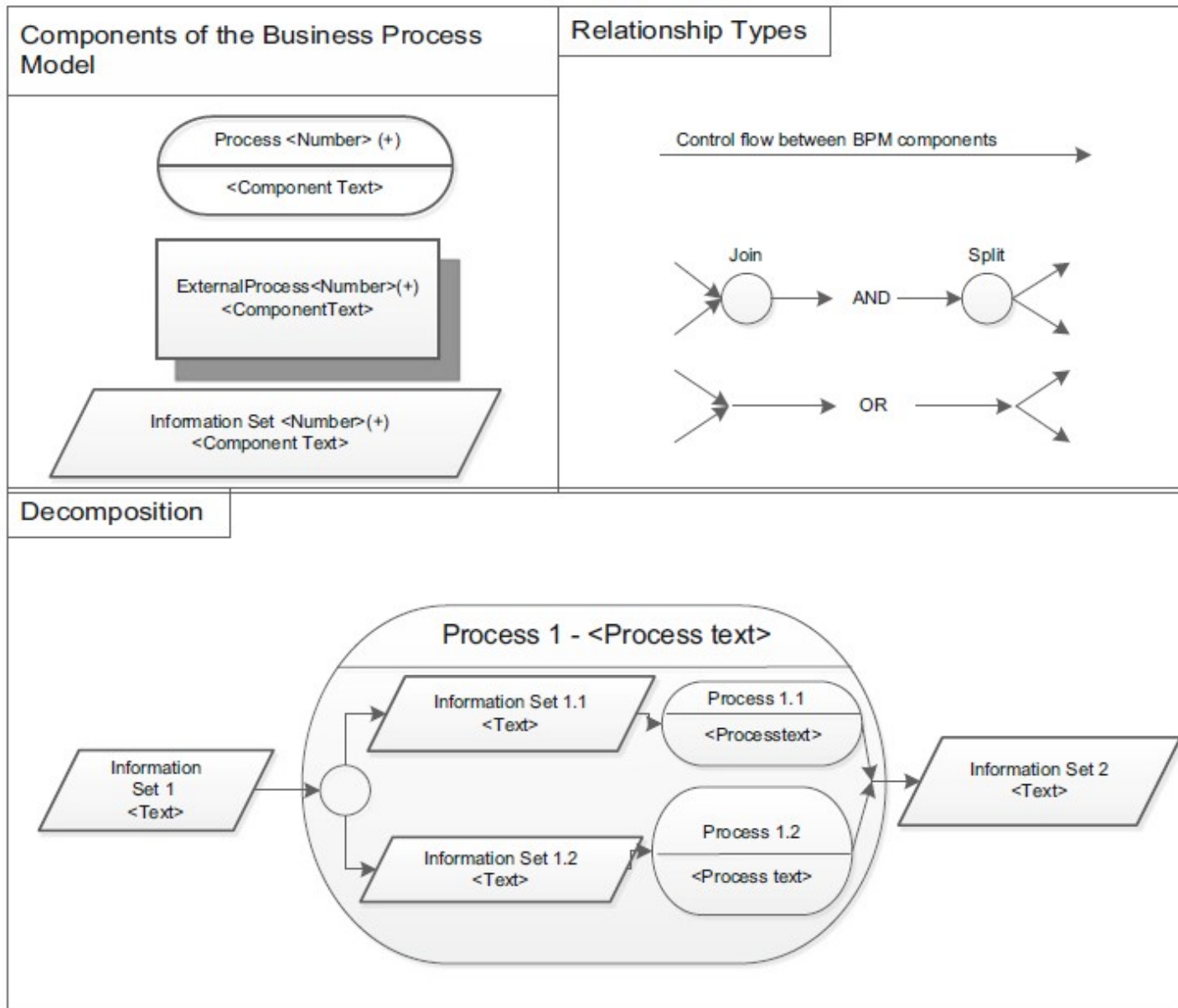


Fig. 8.40 Notation for Business Process Model

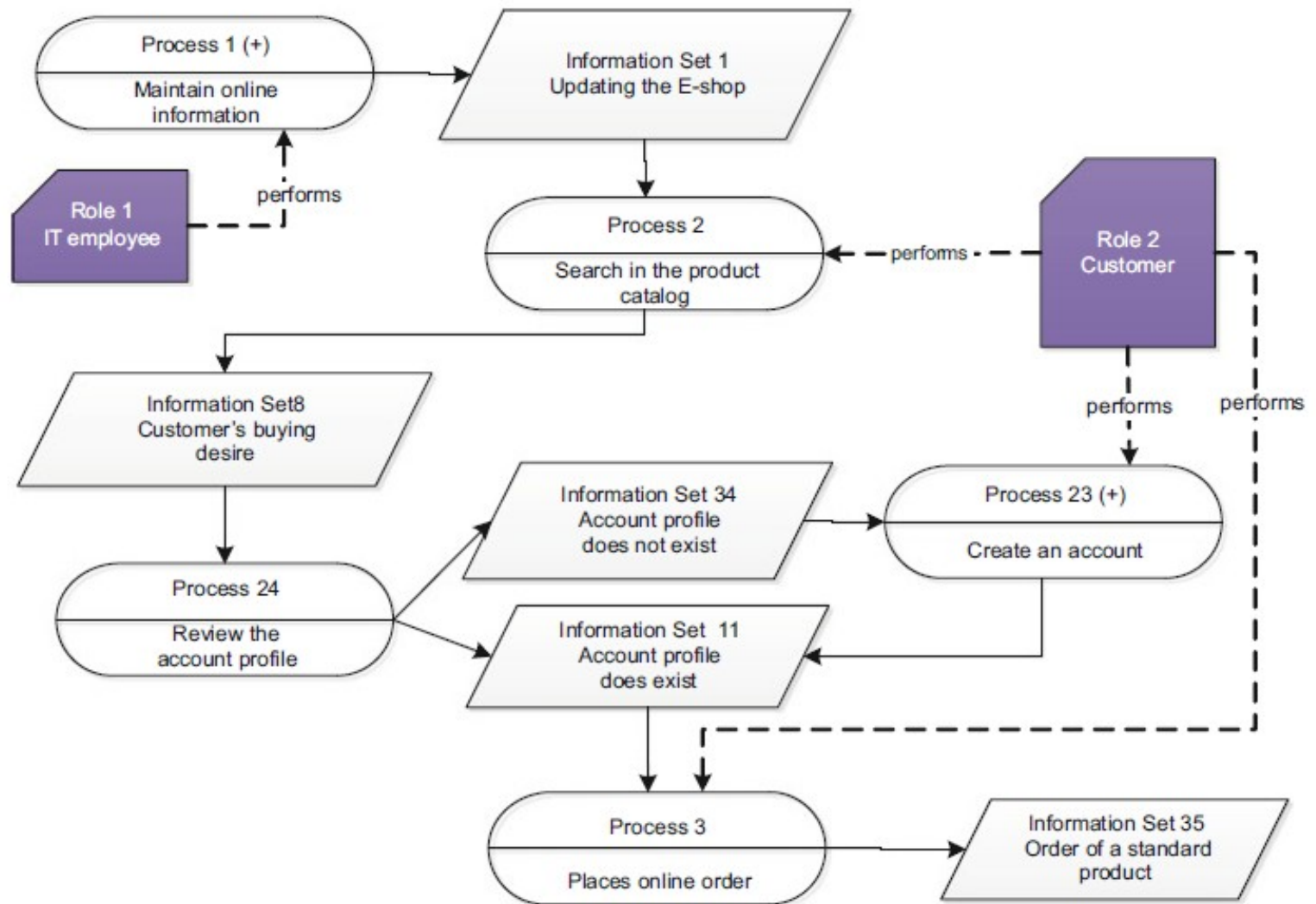


Fig. 8.43 Example of a business process model: Process of a customer order

Actors and resources model

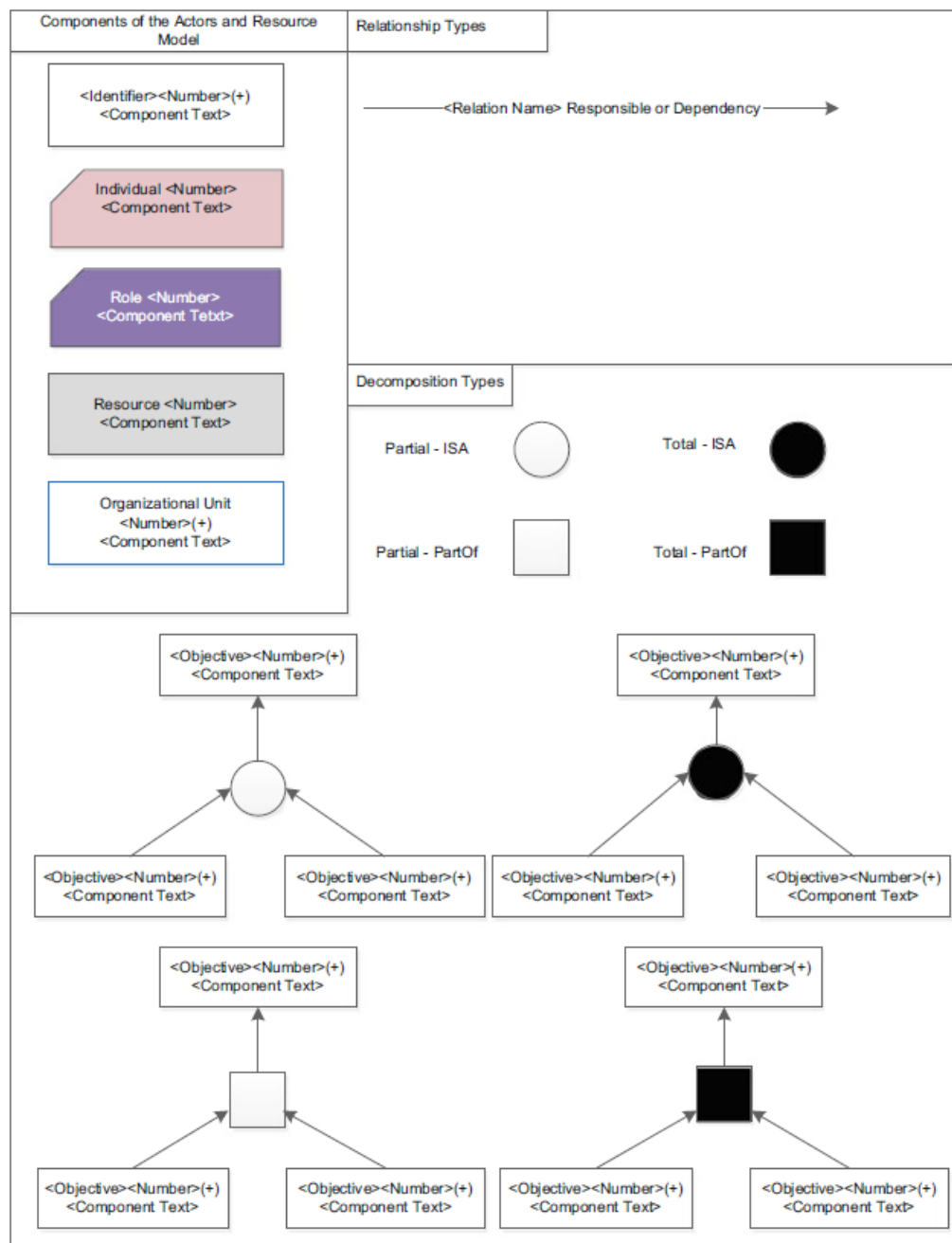


Fig. 8.48 The notation for the Actors and Resources Model components

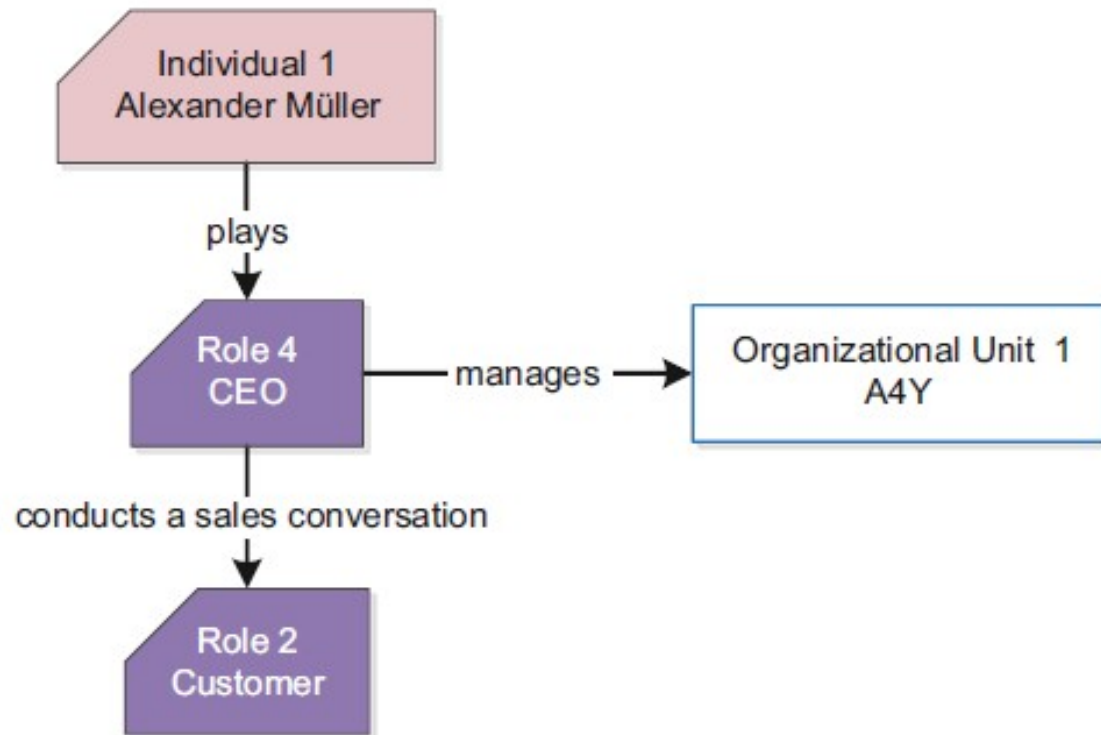


Fig. 8.49 Example of the actors and resources model

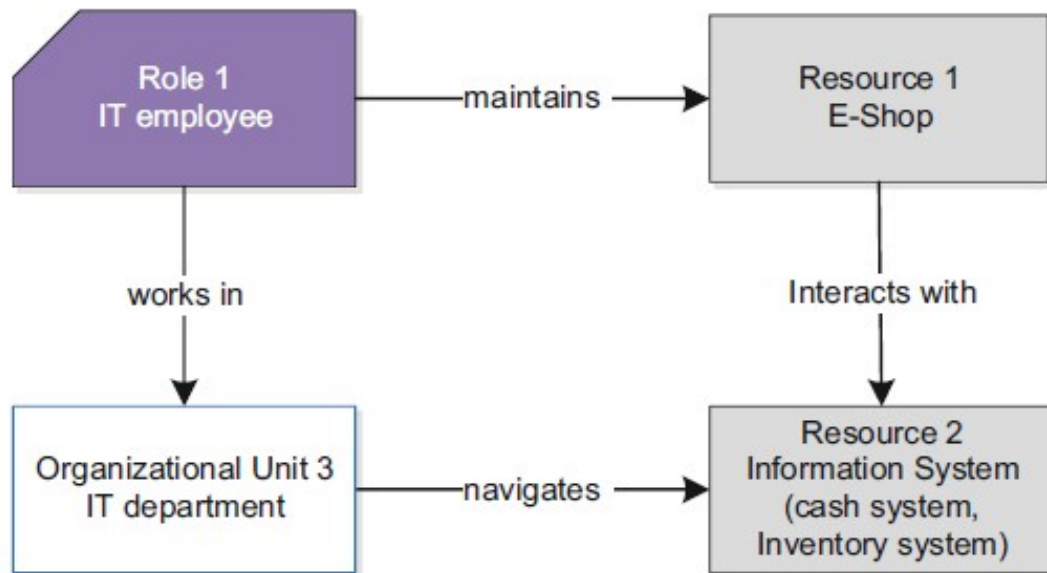


Fig. 8.50 Example of the interaction of roles, organizational units and resources in the actors and resources model

IS Req. And Comp. model

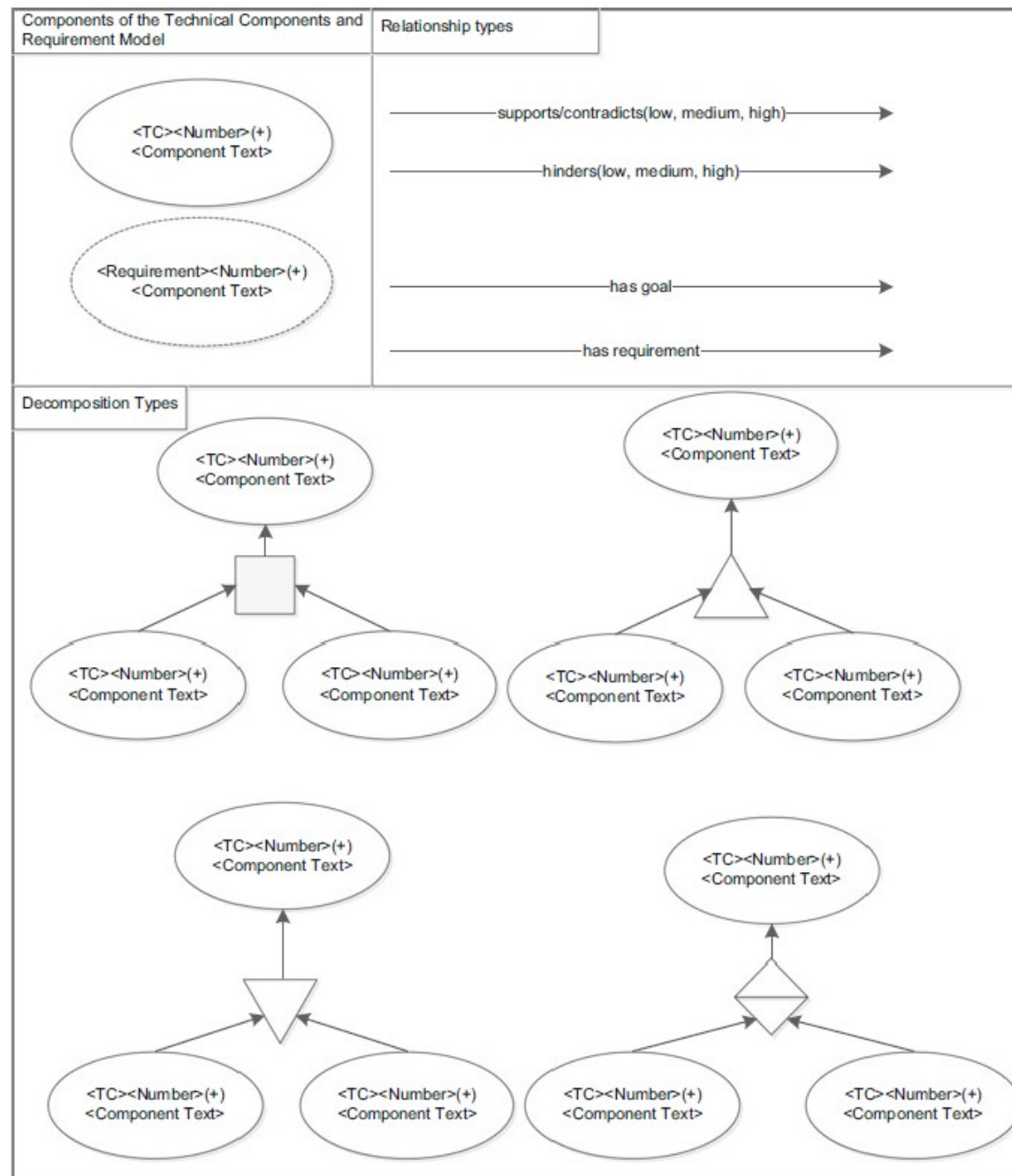


Fig. 8.54 The notation for the Technical Components and Requirements Model components

Intermodel links

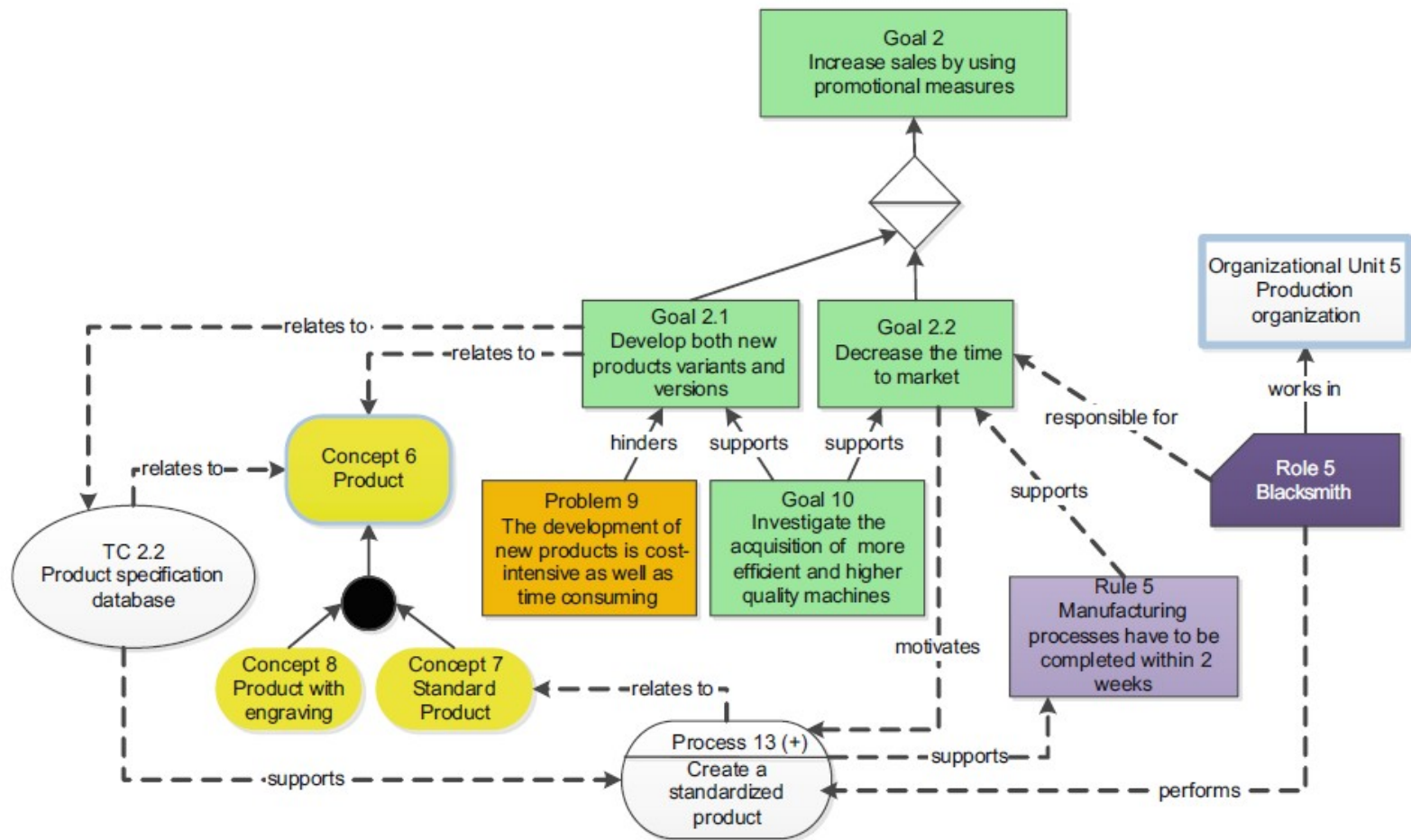


Fig. 8.61 Inter sub-model links (*dashed arrows*) between a Goals Model fragment and components of other sub-models

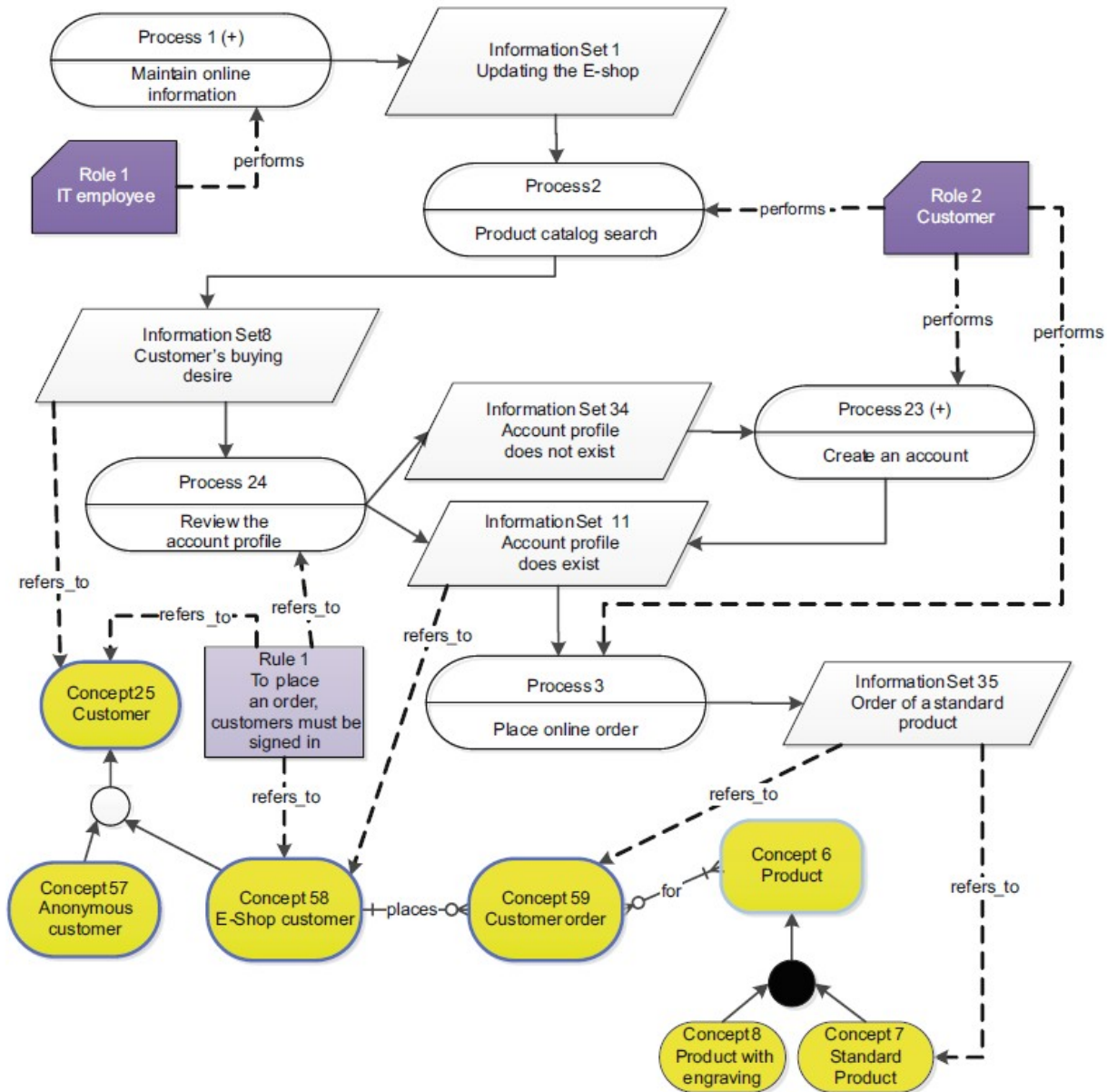


Fig. 8.62 Links between information sets in the Business Process Model and Concepts Model components

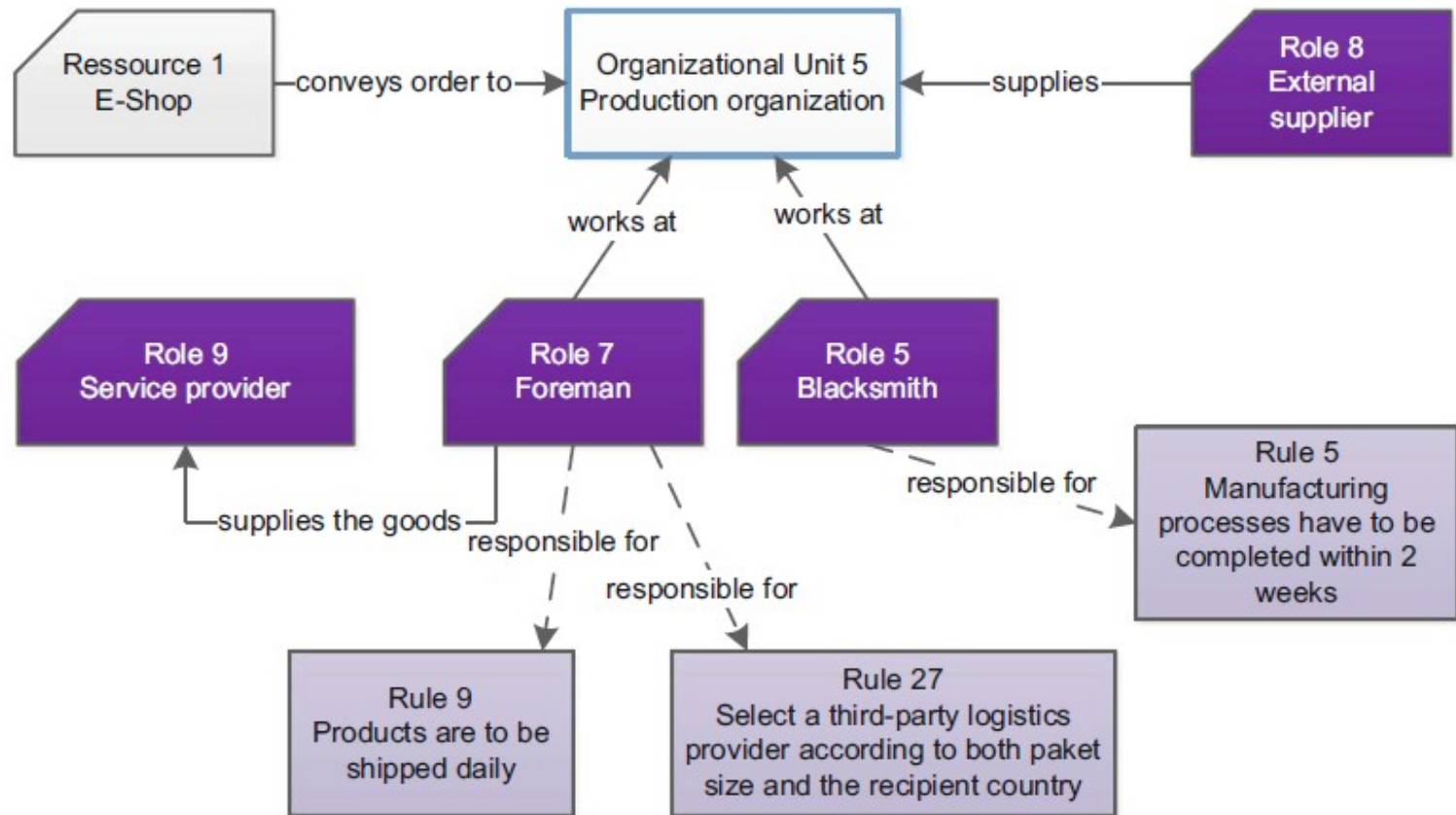


Fig. 8.63 Fragment of an Actors Resources Model showing that some roles are responsible for rules

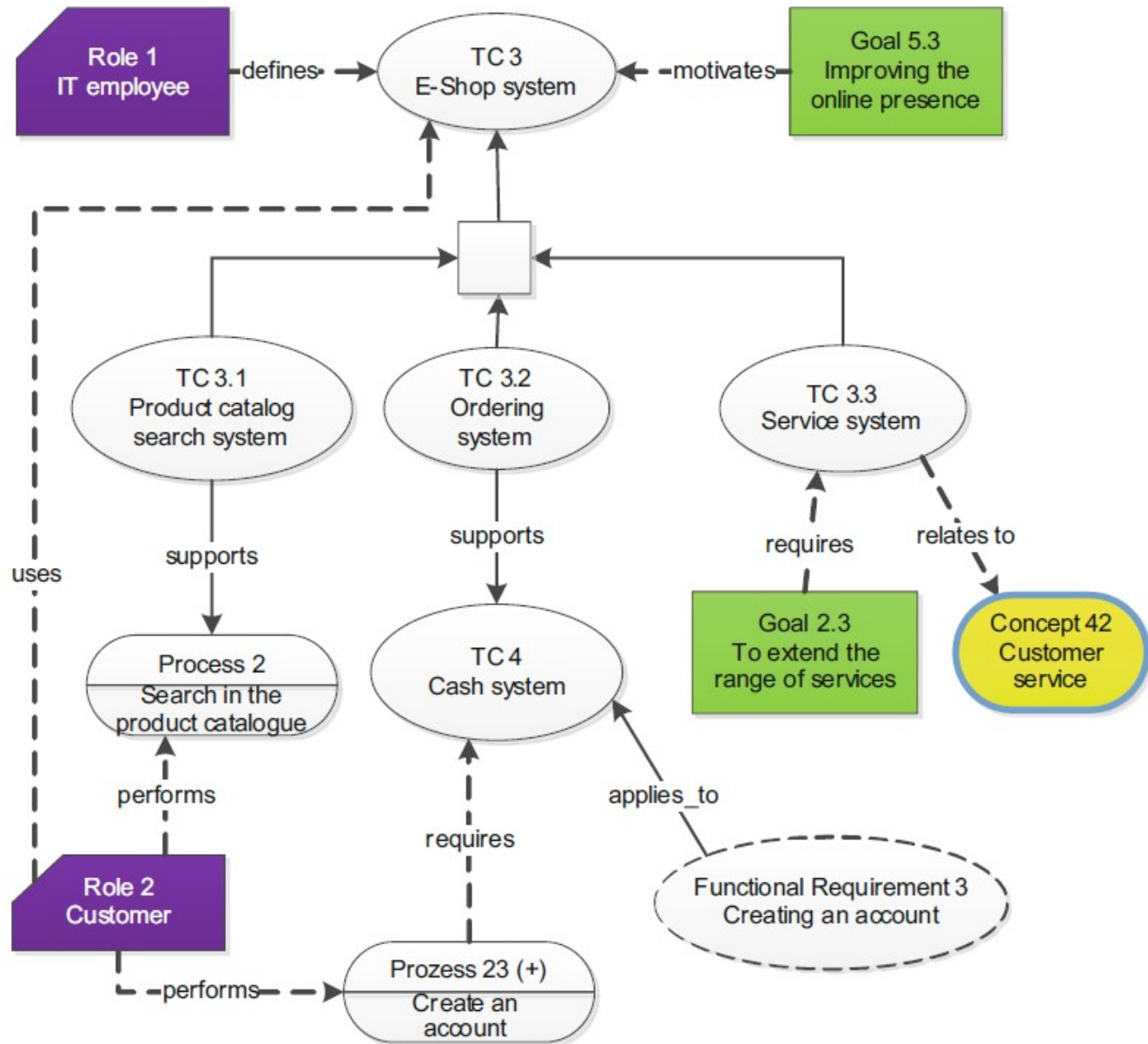


Fig. 8.64 Inter model links related to IS technical components

Quality of Enterprise Models



Fig. 12.6 The modeler in discussion with the stakeholders of the company (enterprise model is visible in the background as initial version on plastics and as electronic version)